

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A2818

F22

cop. 3

THE FARM INDEX

U.S. Department of Agriculture / July 1974

INDEXING
DC BRANCH



STRAIGHT
GRAINS

PERIODICALS SECTION
CURRENT SERIALS
CORDS

U.S. DEPT. OF AGRICULTURE
NAT'L. AGRIC. LIBRARY
20101
7 270

A new look at the farm income situation shows realized net income in 1973 reached \$32.2 billion. That's sharply higher than January's preliminary estimate, drawn from data available as of mid-December.

Marketing receipts were revised upward based on new information in April and May. Major factors were bigger-than-expected sales in 1973 of crops grown in 1972 . . . larger sales of crops formerly stored on the farm under Government loan . . . and higher-than-expected livestock receipts.

Realized net income this year will probably retreat some \$6-8 billion from last year's mark. But economists caution that unexpected changes in farm output and domestic and foreign demand could sharply alter this forecast.

Seasaw fashion, livestock and retail meat prices are headed up this summer as meat production drops back from spring levels. But autumn promises another tilt, with larger supplies and declining prices again in prospect.

Despite ups and downs, retail meat prices are seen below year-earlier levels for most of second half 1974.

Consumer demand for red meats may begin to pick up again. Per capita consumption is not expected to match 1972's 189 pounds, but will still top last year's 175 pounds. During first half 1974, beef and pork use jumped over 4 pounds per person, more than offsetting a small drop in veal and lamb use.

On the farm side, *hog prices* plummeted to the mid-\$20's per hundred-weight in early June before seasonally declining slaughter turned the market up. Prices are expected to average in the mid-\$30's this summer before the normal fall decline.

Hog slaughter should continue above a year ago through second half 1974. But farrowing intentions indicate that early 1975 slaughter will back off from both fall and year-earlier levels.

Prices for fed cattle fell to the mid-\$30's in June before heading up. In June, cattle feeders were reporting losses of more than \$100 a head. Record production and heavy slaughter weights were blamed for the price weakness.

With a drop in cattle slaughter this summer, prices should average in the mid-\$40's. But prices will again soften as fall slaughter picks up. Cows and non-fed steers and heifers will account for much of the gain in fall slaughter.

Feeder cattle prices have generally fallen since last summer's record highs, and downward pressure on the feeder cattle market is expected to continue. Nonetheless, based on the number of cattle on farms and ranches on January 1, we can increase slaughter of cattle and calves by 10 percent a year for the next 3 years and still not halt growth of the Nation's cattle herd.

Slaughter cow prices have dropped this year and will probably continue relatively low during the rest of 1974. *Sheep and lamb slaughter* plunged this

spring and prices climbed to record levels. Seasonally lower lamb prices are on tap this summer and fall.

The peanut outlook has brightened with increased production, use, and prices during 1973/74. Output in 1973 totaled 3.5 billion pounds—up 6 percent from a year earlier, while growers' returns advanced 1½ cents to 16 cents per pound.

Behind the peanut boom are price-conscious consumers, spreading more peanut butter and boosting domestic peanut consumption some 10 percent. Foreign demand is soaring, too. Exports this season will hit an estimated all-time high of 700 million pounds. Best customers are Canada, Japan, and Western Europe.

Non-citrus fruits will prove slightly more abundant this summer than last. Among the gainers: freestone peaches (except for the Southeastern crop), California clingstones, and nectarines. Plum output is seen nearly 20 percent over last year.

Supplies of apricots, California prunes, and early Southeast peaches are forecast noticeably short compared with recent years. West Coast Bartlett pears will probably dip slightly below 1973's utilized production. But strawberry supplies are up slightly.

Generally, fresh fruit prices will drop seasonally through August, though most are expected to remain higher than a year ago.

Canners are particularly concerned about across-the-board cost increases. They face tightening tinplate and sugar supplies, as well as higher prices being sought by grower bargaining organizations. Moreover, continued tight supplies are likely to cause further price increases for most canned non-citrus fruit products.

In the citrus sector, look for total production to fall somewhat shy of last season's record output. Estimated at 13.3 million tons as of last June 1, the citrus crop will nonetheless top 1971/72 by some 10 percent.

A smaller orange crop, particularly in Florida, accounts for most of the decrease. As of June 1, total U.S.



Tobacco Tapers

Tobacco stocks have dropped below 3 billion pounds for the first time in over 20 years. Reasons for the draw-down are a smaller burley crop in 1973 and stronger domestic and foreign use of U.S. tobacco.

Exports of raw tobacco advanced 5 percent during the 1973/74 marketing season. Most of the gain was in flue-cured tobacco, and was spurred by mounting needs of foreign cigarette makers as well as tight supplies of competing foreign tobaccos. Rising U.S. tobacco prices, however, and dollar shortages abroad are expected to slow the pace of tobacco exports later this year.

The 1974 flue-cured crop—seen a tenth larger—should more than offset reduced tobacco carryover and lift total supplies somewhat. Price hikes for fuel and labor are projected to raise costs of harvesting and curing the flue-cured crop by some 6 cents a pound.

orange production stood at 216 million boxes—down 4 percent from last season.

Through early June, more oranges had been processed this year than last. But with smaller supplies remaining for harvest this year, total processing for the entire 1973/74 season will probably not match last season's outturn.

On-tree returns to the Nation's orange growers are running above last year and are expected to remain there through summer. On-tree returns for grapefruit picked up sharply in May but probably won't reach the high levels of last season.

Meantime, strong hot-weather demand for lemons is expected to keep prices well above last year till summer's end.

Sharp seasonal declines in farm milk prices have clouded the milk production outlook. The question is, will low returns hasten the exodus from dairying during the remainder of the year?

Some factors to consider:

✓ Seasonal declines in farm milk prices have proved steeper than normal. All-milk farm prices dropped \$1.06 per 100 pounds to \$7.88 during second quarter 1974, while manufacturing milk prices plunged \$1.61. Prices should rise seasonally this fall and winter, but not to levels of earlier this year.

✓ Feed prices may ease later this year, but other costs will likely continue higher.

✓ The year opened with large supplies of replacement stock on dairy farms. And with lower slaughter cow prices, culling of dairy herds isn't expected to pick up substantially.

✓ Alternative farming enterprises don't look very tempting to dairymen right now, particularly with low beef and pork prices. And creeping unemployment rates don't make finding work off the farm look attractive.

Milk production will probably hold below year-earlier levels in coming months, though the rate of decrease may continue to taper off. Output per cow should continue rising, especially if feed prices moderate. Further slowing of the rate of decline in milk cow numbers is also in prospect.

Features

Spreading the Margarine Story

4

All about margarine—how and why it managed to whip butter to become the Nation's leading table spread, with use twice that of butter.

The Price of Bread

8

Just how much influence do farm prices have on the cost of a loaf of bread? And how much would wheat have to sell for to bring bread to \$1 a loaf?

Grains & Trains

10

Last year's boom in grain exports produced a gamut of shipping bottlenecks. Here's a look at railroad problems and the situation shaping up this year.

Departments

Outlook

2

Recent Publications

14

Addresses of State Experiment Stations

14

Economic Trends

15

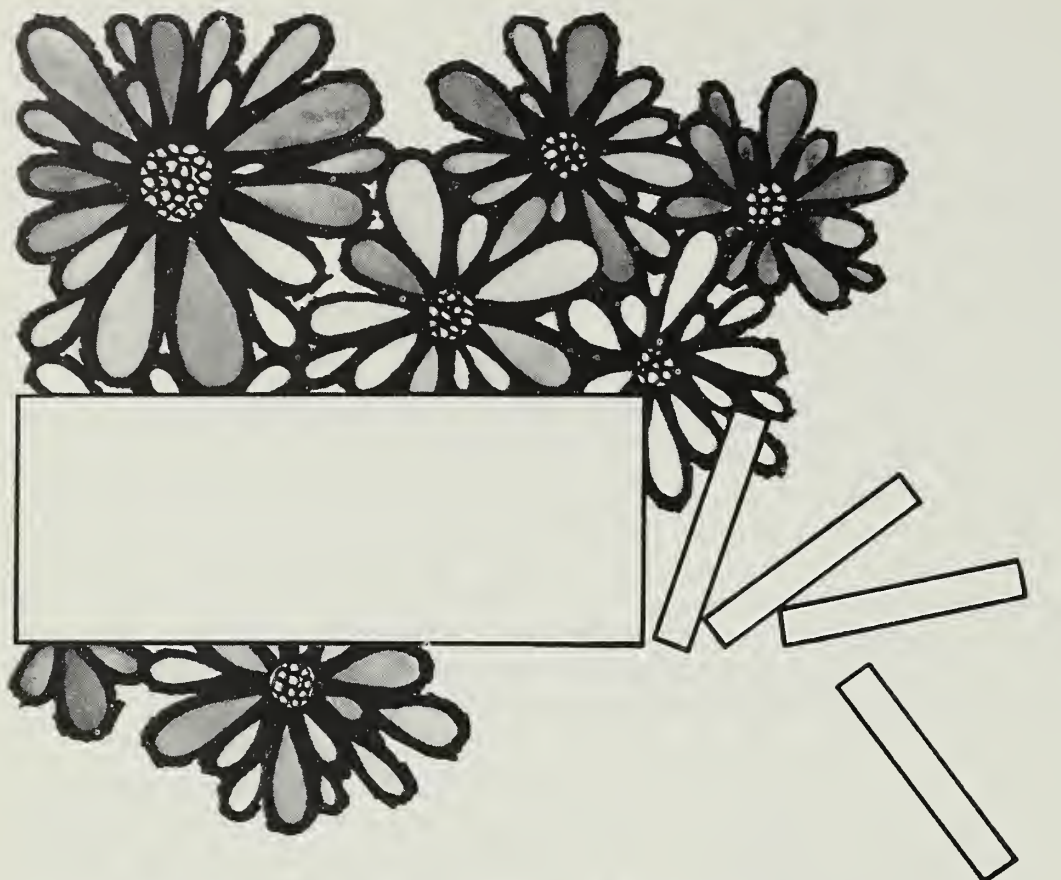
Martin Schubkegel, Editor.

Diana Morse, Associate Editor; Virginia Broadbeck, Diane Decker, Walter M. Patrick, Staff Editors.

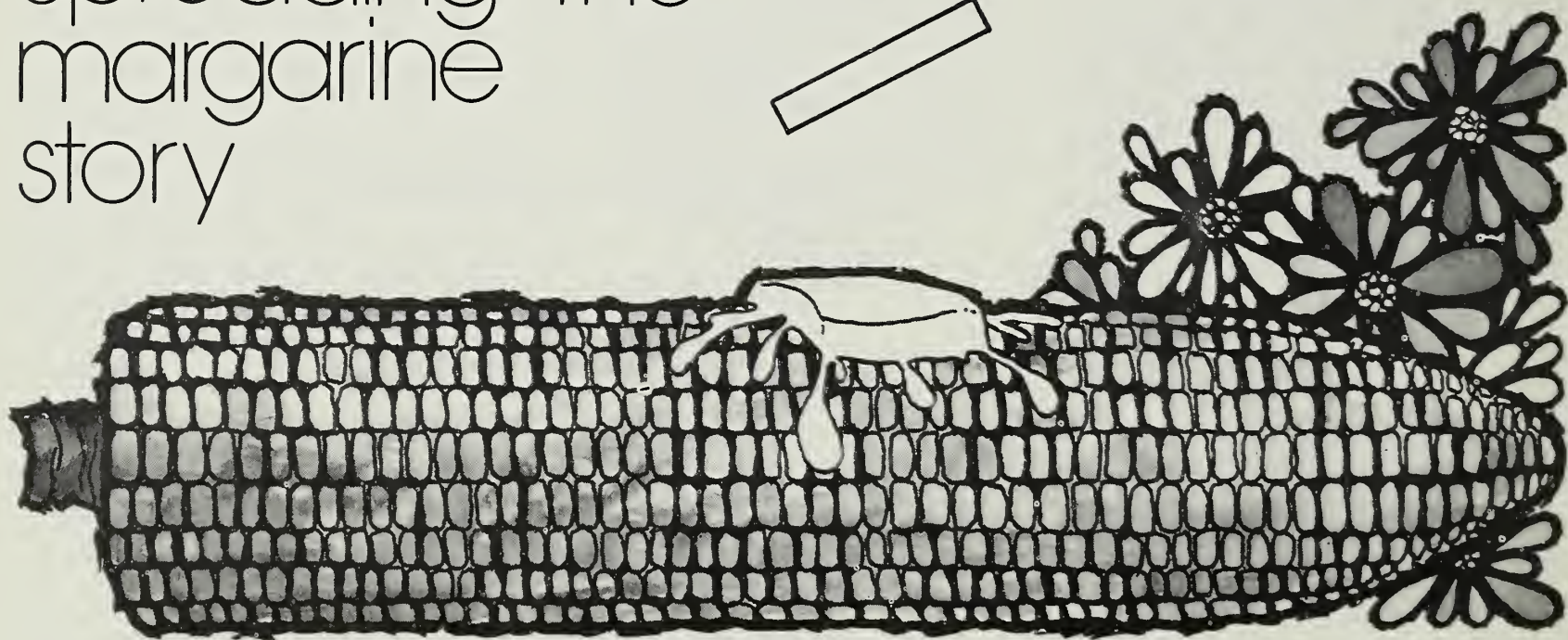
The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture, July 1974. Vol. XIII. No. 7.

Readers are invited to write for the research materials on which we base our articles. Address queries to The Farm Index, Rm. 1664, Economic Research Service, U.S. Department of Agriculture, Wash. D.C. 20250. Please cite article titles when ordering.

Contents of this magazine may be reprinted without permission. They are based on research of the Economic Research Service and on studies done in cooperation with State agricultural experiment stations. The Secretary of Agriculture has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this publication approved by Director of the Office of Management and Budget, May 24, 1972. Subscription price \$5.65 yearly (\$7.10 foreign). Single copies 50 cents. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.



Spreading the margarine story



Margarine has made a deep slice into the table spread market since 1950, with margarine's use nearly twice what it was and butter consumption down more than half.

Margarine lovers owe a debt of thanks to Napoleon.

History says he offered a prize in the latter part of the 1800's to the man who came up with a substitute

for butter, which was then in short supply, to feed to his armies and the French people.

The prize was awarded to Hippolyte Mege-Mouries. He produced the first acceptable alternate for butter in about 1869. It quickly spread to the U.S.

The American dairy industry didn't exactly greet margarine with open arms, for it spelled competition for one of their mainstay products.

So, laws were written to discourage the use of the new product.

Many of those laws remained on the books for years. As recently as 1969, most States still had laws regulating margarine. Many have been repealed or modified.

First on the table. There are many households today that feature nothing but butter on their tables, and millions insist on butter when it comes to elegant dining. Yet the

large majority opt for margarine. It's become the No. 1 table spread, with consumption now about 2½ times that of butter.

Napoleon may get the roses for introducing margarine to the world, but in this country World War II helped pave the way for its popularity. That's when restrictions were placed on the use of butter and other food fats, and when consumers first were forced to switch to margarine.

Added shove. Removal of Federal and State taxes on margarine and other barriers to its use, especially on the use of colored margarine, gave further impetus to expanding margarine consumption.

Margarine's quality improved, too. You don't have to add the package of coloring anymore. It has better consistency than the old version . . . looks better . . . and tastes better. Also, the "cholesterol scare" hasn't hurt margarine.

Price, however, may be margarine's real claim to fame. Over the last 24 years, margarine's cost has averaged almost two-thirds below that of butter.

Butter loses. Last year, prices of both products advanced sharply—the highest of any year during the 1950-73 period. Even so, margarine's per capita use stuck at 11.3 pounds—the same as in 1972—whereas butter's dipped from 4.9 pounds to 4.8.

If you take the 1950-73 period, margarine carved a king-sized slice in the table spread market. Usage went from 6 pounds per person to over 11 pounds, a near doubling. But butter consumption melted from about 10½ pounds to nearly 4½—a decline of over 50 percent.

The margarine industry could not have kept up with the fast-growing demand had it not been for the dramatic expansion of our vegetable oil industry, which began during World War II. Mainly credited were the huge increases in the production of soybeans and soybean oil. Soybean oil is margarine's chief ingredient, making up about four-fifths of all the oils used.

In 1950 we used just 0.3 billion pounds of soybean oil in margarine.

By 1973 the figure had ballooned to 1.5 billion pounds. Also in 1950 the most widely used oil was cottonseed oil. Lately it has fallen behind not only soybean oil, but also behind corn oil and the animal fats.

Corn oil margarines, however, have a lot going for them, since they are said to control cholesterol buildup in the blood because of their high ratio of polyunsaturated oils.

Vegetable oils are highly substitutable.

Cheaper soybean oil. Most times, your bar of margarine has a combination of several vegetable oils. As a rule, though, the wholesale price of soybean oil averages a bit under cottonseed oil and significantly under the premium oils such as corn oil, so you can expect that the bulk of the margarine will be made from soybean oil.

If soybean oil is cheaper, why the steep prices for margarine? Statistics show we paid 37.4 cents a pound in 1973—a new record for the 1950-73 period.

The bigger price tag is explained by two factors.

One, the prices of all the vegetable oils used in margarine took a big jump in 1973, due to an imbalance in the supply and demand for oils. Tight supply and strong demand boosted prices.

Soybean prices, for example, skipped from 10.6 cents per pound in 1972 to 19.8 cents last year. And this cost put a lot of pressure on the retail price of margarine.

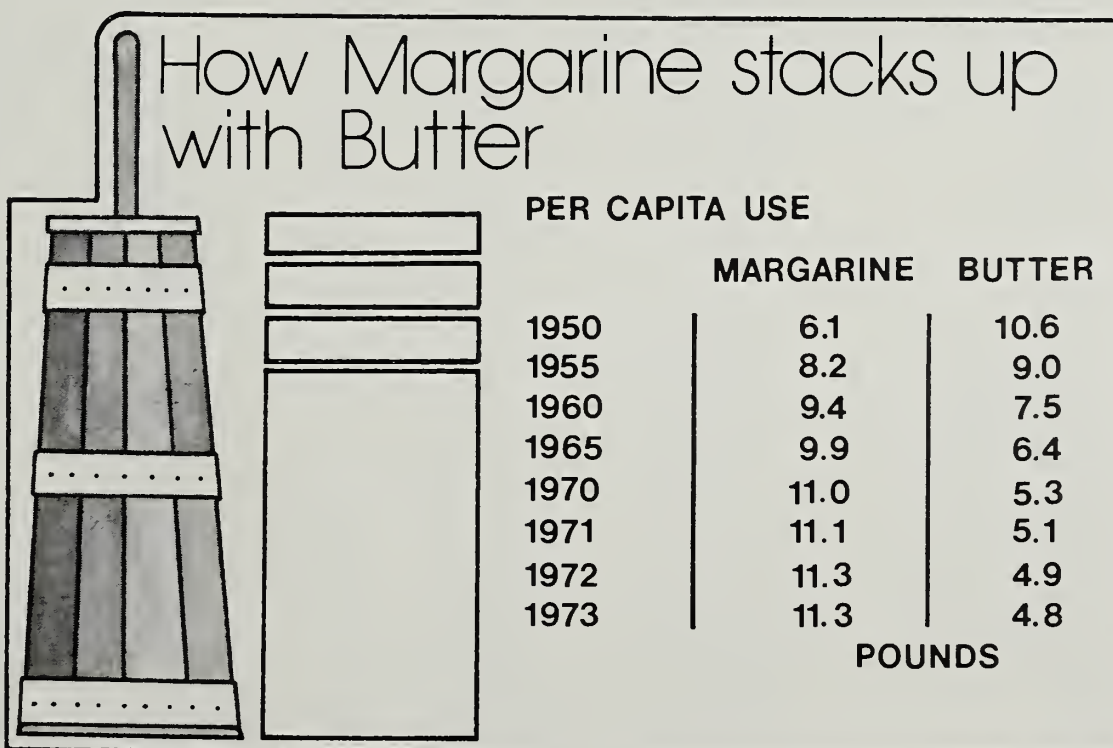
Reason No. 2. The price of butter wasn't standing still either. Retail butter prices, due to tight supply, averaged 92 cents a pound in 1973, up from 87 cents a year earlier. This increase boosted the demand for margarine.

Study results. ERS economists who recently did a study on margarine prices found that the price of margarine goes up as the ingredient oil prices go up, and it rises as the price of butter rises. The two factors explain about four-fifths of the change in margarine prices in the 1960-73 period.

The high prices for butter, margarine, and vegetable oils that prevailed in 1973 are continuing this year.

But, the economists add that the recent high prices for soybean oil—among other factors—could upset the traditional relationship. Butter relative to margarine could be cheaper than in the past year.

[Based on "Margarine Consumption and Prices," article by Stanley A. Gazelle and Paul D. Velde, Commodity Economics Division, in *Fats and Oils Situation*, FOS-273, July 1974.]



Winding up its regional series on American agriculture's capacity to produce, ERS looks at the West, projecting its capacity to meet needs to the year 2000.

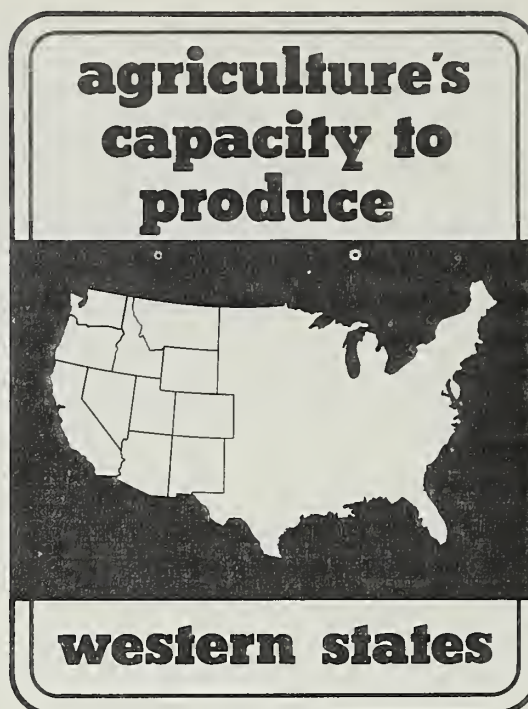
By the turn of this century, the West is expected to be playing a larger role in agricultural production in the U.S. . . . a fact attributable primarily to a projected increase in irrigated cropland.

In particular, the 17 Western States* are projected to produce a substantially larger share of the Nation's rye, peanuts, Irish potatoes, cotton, and eggs by the year 2000.

They're projected to produce a substantially smaller share of only three major commodities—barley, dry beans and peas, and turkeys.

Of all major commodities, barley is the one projected to show the most change in the West. Nearly 85 percent of the Nation's barley was produced there in 1970-72 but only about 63 percent is projected for the West

*Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, Utah, Washington, Oregon, California, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas.



by 2000.

Of the 20 major commodities in the ERS projection, the West is shown to step up production of 14 commodities by the year 2000. Peanut production is projected to double, grain sorghum is projected to go up by two-thirds, and production of cattle and calves, chickens, and eggs, by half.

The only major commodities for which production in the West is expected to decrease in the next 25 years are oats, barley, rye, sweet potatoes, sheep and lambs, and milk.

Use fewer acres. To meet production demands, the 17 Western States are projected to use fewer acres than they did in 1969, due principally to increases in crop yields and irrigated crop acreage.

In a second projection—to the year 2020—ERS shows both the U.S. and the Western States experiencing significant crop yield increases relative to 1970-72.

For the U.S. as a whole, the smallest yield increase is for sugarbeets—16 percent over the 20 tons per acre of 1970-72. The largest increase would be for rice—72 percent over the 4,679 pounds per acre of 1970-72.

The West is projected to experience even further increases than the U.S., except for sugarbeets, due to higher irrigated yields and further increases in irrigated crops in the West.

The smallest yield increase projected for the West in 2020 is in

THE UNITED STATES' AND 17 WESTERN STATES' AGRICULTURAL PRODUCTION, 1970-72 AND 2000

	1970-72 Average			2000 Projections				
	U.S.	Western States	West's Share of U.S. Production	U.S.	Western States	West's Share of U.S. Production	U.S. 2000 As Percent Of U.S. 1970-72	West 2000 As Percent Of West 1970-72
	Millions		Percent	Millions		Percent		
Corn	5,122 bu.	815.8 bu.	15.9	6,761 bu.	909.9 bu.	13.5	132.0	111.5
Oats	830.1 bu.	317.8 bu.	38.3	750.7 bu.	292.9 bu.	39.0	90.4	92.2
Barley	434.4 bu.	367.8 bu.	84.7	551.3 bu.	345.3 bu.	62.6	126.9	93.9
Sorghum	789.5 bu.	718.6 bu.	91.0	1,296 bu.	1,203 bu.	92.8	164.2	167.4
Wheat	1,505 bu.	1,209 bu.	80.3	1,671 bu.	1,336 bu.	80.0	111.0	110.5
Rye	38.4 bu.	26.9 bu.	70.0	28.0 bu.	21.0 bu.	75.0	72.9	78.1
Rice	85.0 cwt.	40.7 cwt.	47.9	108.7 cwt.	50.3 cwt.	46.3	127.9	123.6
Peanuts	3,086 lbs.	622.0 lbs.	20.2	4,691 lbs.	1,220 lbs.	26.0	152.0	196.1
Sugarbeets	27.3 tons	23.1 tons	84.6	28.7 tons	23.2 tons	80.8	105.1	100.4
Dry beans and peas	20.3 cwt.	13.0 cwt.	64.0	28.7 cwt.	16.4 cwt.	57.1	141.4	126.2
Irish potatoes	313.7 lbs.	191.0 lbs.	60.9	372.6 lbs.	248.1 lbs.	66.6	118.8	129.9
Sweet potatoes	12.5 lbs.	1.6 lbs.	12.8	11.8 lbs.	1.4 lbs.	11.9	94.4	87.5
Cotton	11.5 bales	5.7 bales	49.6	11.7 bales	6.5 bales	55.6	101.7	114.0
Cattle, calves	40,020 lbs.	22,785 lbs.	56.9	57,701 lbs.	33,561 lbs.	58.2	144.2	147.3
Hogs	22,173 lbs.	4,118 lbs.	18.6	28,495 lbs.	4,760 lbs.	16.7	128.5	115.6
Sheep, lambs	1,052 lbs.	812.9 lbs.	77.3	952.6 lbs.	741.9 lbs.	77.9	90.6	91.3
Chickens	12,211 lbs.	1,433 lbs.	11.7	19,236 lbs.	2,157 lbs.	11.2	157.5	150.6
Turkeys	2,297 lbs.	782.5 lbs.	34.1	3,826 lbs.	1,081 lbs.	28.3	166.6	138.2
Eggs	69,389	15,219	21.9	83,778	22,638	27.0	120.7	148.7
Milk	118,591 lbs.	28,200 lbs.	23.8	118,800 lbs.	26,269 lbs.	22.1	100.2	93.2

sugarbeets—9 percent more than 1970-72's yield of 22 tons per acre. The largest gain is an 88-percent rise in oat yields from the 1970-72 average of 47 bushels per acre.

While these Western States had 127 million acres of harvested cropland in 1969, they are projected to harvest 125 million in the year 2000.

Overall, the Western States supplied slightly less than half of the 459 million acres comprising the Nation's total cropland in 1969—a proportion that's not likely to change much by 2000.

Tops in irrigation. However, the West supplied nearly 90 percent of the Nation's 37 million acres of irrigated cropland.

By 2000, total irrigated cropland is projected to increase by 4 million acres, with three-quarters in the West.

For irrigated harvested cropland only, total acreage is projected to go from 33 million to 37 million acres, of which 33 million—and most of the increase—would be in the West.

About 1 million acres of this additional irrigated land in the West is expected to come from public development. Private irrigation development is projected at only 2½ million acres—a result of a likely decrease of 1½ million acres in Texas caused by depleted ground water supplies.

The 17 Western States are estimated to have a 5-million acre decrease in nonirrigated harvested cropland between 1969 and 2000.

Water in the West. In projecting how much more water the West will be using for irrigation by the turn of the century, ERS puts the figure at 10 percent. This is water consumed—meaning it does not return to surface or ground water—and would thus total 63,580,000 acre-feet (volume of water that would cover 1 acre to a depth of 1 foot) by the year 2000.

By regions in the West, however, this estimate varies considerably. In the Southern Plains—Oklahoma and Texas—water consumed is projected to go down by about 1.7 million acre-feet. While water consumed is ex-

pected to go up in the other regions, the Pacific States of Washington, Oregon, and California would see the greatest increase—nearly 3 million acre-feet.

Water consumed in the Mountain States—Montana, Idaho, Wyoming, Colorado, Utah, Nevada, Arizona, and New Mexico—is projected to go up by about 2.7 million acre-feet, and in the Northern Plains, by 1.9 million acre-feet.

ERS also made a set of projections based on a much higher export demand by the year 2000. Such demand would require a continued movement toward freer trade and a comparative advantage for the U.S. in agricultural trade.

Under these projections, another 1.5 million acres of irrigated cropland would be added, along with 47

million acres of nonirrigated cropland, of which 14 million would be in the West.

The reason the high export level does not affect the West more is that a movement toward freer world trade is projected to involve mainly feed grains and soybeans—which are predominantly Corn Belt crops.

[Based on manuscript entitled *Agricultural Production and Irrigation Requirements in the West in the Year 2000*, by Marlin Hanson, Natural Resource Economics Division, and Allen Smith, National Economic Analysis Division, also, "Agricultural Production and Irrigation Requirements in the West Over the Next 50 Years," paper presented at the American Society of Civil Engineers meeting on Water Resources Engineering, Los Angeles, Calif., Jan. 23, 1974, by Leroy Quance, National Economic Analysis Division, Marlin Hanson, and Allen Smith.]

Farmland Values Make Record Spurt

The farmland you bought for \$1,000 an acre in March 1973 would have cost 25 percent more—or \$1,250—had you waited another year.

That, at least, was the average percentage hike in farm real estate values across the Nation, according to a USDA survey for the year ending March 1, 1974.

The leap in farmland values vaulted the per acre figure to \$310 in March 1974 and was the biggest increase ever for a 12-month reporting period. Records were previously reached in 1920 for the year ending March 1 and in 1973 for the reporting year ending November 1. Since 1967, farm real estate values have soared 87 percent, or at a compound rate of 9.35 percent a year.

ERS attributes last year's gain to the record level of net farm income in 1973 and to buyers' optimism about future income.

North Dakota posted the largest surge in farmland values for the year ending March 1974—36 percent—spurred mainly by abnormally

high prices for small grains. Iowa and Illinois ran a close second, each with 34 percent. Washington's advance, 11 percent, was smallest.

Compared with earlier surveys, the supply of land on the market appears to be somewhat smaller. In March 1974, 38 percent of the reporters thought that the number of units offered for sale has decreased, up from 30 percent the previous March. Those stating that the number had increased dropped from 16 percent in March 1973 to 13 percent in March 1974.

As for the coming year, ERS expects continued growth in farm real estate values but at a slackened rate. The bearish factors include a projected decline in farm exports; higher prices paid by farmers in 1974 and higher interest rates and payments; a drop in net farm income; and reduced demand for rural residences and rural properties.

[Based on *Farm Real Estate Market Developments*, Supplement No. 2, CD-78, June 1974, by William D. Crowley, Jr., and Robert D. Reinsel, National Economic Analysis Division.]

The Price of Bread

Bread, because it's so universally consumed, often commands center stage as an economic barometer. One of ERS's jobs includes keeping a close watch on its cost.

In the midst of the \$1-a-loaf controversy, ERS economists took pen in hand to see just what effect the price of wheat has on a loaf of bread.

And for most consumers, the results might be surprising.

For one, the price of a bushel of wheat would have to go up about six times from the March level to raise the cost of a pound-and-a-half loaf of bread to \$1. That would put the farm price of wheat at about \$30 a bushel.

Wheat adds 4 cents a loaf. Even if the farmer had donated his wheat

DIVVYING UP. Last year, the average price of a 1-pound loaf of bread was 27½ cents. Of this the retailer got nearly 5½ cents, the baker 14 cents, the miller 1 cent, "other" spreads 1.7 cents, and the farmer, 5½ cents.

last year, consumers would have had to pay better than 23 cents for a 1-pound loaf of white bread. The cost of wheat added only 4 cents.

In all, farmers supplied ingredients that accounted for about a fifth of the cost of a pound loaf of bread. This includes wheat, lard, shortening, sugar, and dried milk.

Normally, farm price fluctuations have very little effect on the price of bread. Up until last year, increases at the farm level had added only slightly to the cost of bread over the past quarter of a century.

Sets record. But for 1973, average farm value increases added 1.7 cents to the price of a pound loaf of bread. Along with marketing cost increases, this sent bread to a record annual jump of 2.9 cents.

Actually, the changes within the year—January to December—were much sharper than indicated by the averages. The farm value rose from 4.3 cents in January to 7.2 cents in December—an increase of 2.9 cents just in farm value. Thus, with the

rise in marketing costs at 4.1 cents, the retail price of a pound loaf of bread rose 7 cents from the first to the end of the year.

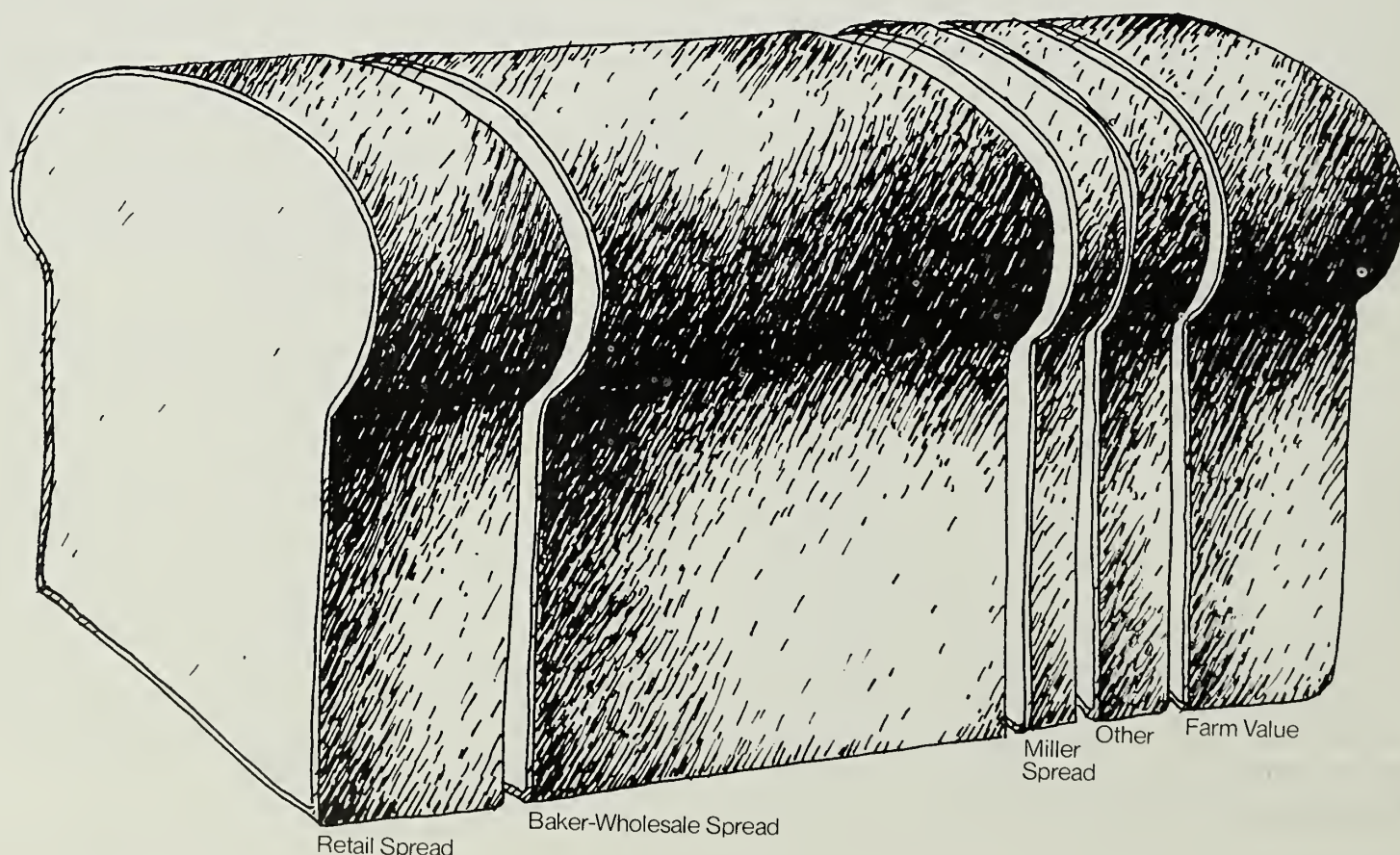
The rise in wheat prices and the farm value is mainly attributable to a world situation of tight grain supplies that has brought unusually strong export demands for the past 2 years.

Only the sixth time. The sharp rise in farm prices drove up the farmer's share of the price of bread for only the sixth time in the past quarter of a century. It went down in 12 years and remained the same in the others.

Bread prices in 1947-49 averaged 13½ cents for a pound loaf. Prices in 1973 were up 14 cents to 27½ cents a loaf. Twelve cents of this increase went for marketing and 2 cents to the farmer.

Here's a look at how the 1973 average price of 27½ cents was accounted for:

Farmer. He got on the average about 5½-cents from a 27½-cent



pound loaf last year. For the previous 6 years, he received from 3.3 cents to 3.8 cents. Still, farmers got a smaller share of the price of a loaf of bread than in the 1947-49 period—20 percent compared with 25 percent.

Miller. The miller's share has bounced around over the past quarter of a century from 0.5 cent as recently as 1970 to its high of 1 cent as recently as last year.

Over the years, the miller has not played as big a role in price increases as the baker or the retailer. In fact, his 3½-percent share of the price of a pound loaf of bread last year was 1 percentage point less than it was in 1947-49.

"Other." ERS lumps the cost of several minor nonfarm ingredients and charges for relatively minor functions under "other spreads." These charges have fluctuated over the years, but reached a high last year of 1.7 cents. They represent the difference between the cost to the baker for all ingredients and what the miller and farmer get.

Baker. The baking industry last year got a little better than half the price of a loaf of bread—14 cents. Back in 1947-49, bakers were receiving a little less than half the total.

About half of the baker margin goes for wages and salaries, including fringe benefits.

Over the years, output per man-hour in bakeries has not kept up with wage increases, resulting in higher labor costs per loaf. Hourly earnings for production workers in bakeries in 1972 were about \$3.70, or about triple the \$1.15 average in 1947-49.

In general, the costs of baking and selling bread are trending up. With costs increasing, the baking industry has increased mechanization to raise output per hour of production labor used. For example, bulk methods of handling flour have largely replaced bag handling methods. Bread can now be delivered in bulk by train or truck and moved by air pressure through tubes into storage bins where, in many instances, it

Not Out of Line

Sharp though it seems, the jump in bread prices in recent years has been no greater than the increase in consumer prices of all foods.

During the 32 months of price controls—from August 15, 1971, to April 30, 1974—the average price of a 1-pound loaf of white pan bread rose 37 percent, whereas consumer prices of all foods as measured by the market basket index went up 38 percent.

The farm value for ingredients in this loaf of bread increased 123 percent. The miller's spread, difference between what he paid for the wheat and the price he got for the flour, advanced 129 percent; the baker-wholesaler spread by 18 percent; and retailer spread by about 13 percent.

Much of the bulge in the value of farm ingredients (mainly wheat) was due to higher farm prices and to the pricing flexibility of millers operating under the "volatile price" ruling. In effect, this special ruling permitted millers to charge whatever the market would bear, putting them in a position to pay wheat farmers competitive prices and to pass on the increase and then some.

Probably the hardest hit by price controls were the bakers, who were caught between the highly competitive pricing conditions in their own industry and the unique pricing provisions accorded the flour millers.

[Based on material by Charles O'Dell, Commodity Economics Division, *Wheat Situation*, WS-228, May 1974.]

is moved into an automated bread production line.

Profits after taxes per dollar of sales have trended down slightly over the years, according to a large sample of bakery firms. In 1955, they were nearly 3 percent and have gradually declined to 1.3 percent in 1973.

However, profits after taxes as a percent of stockholders' equity have trended up in the industry much of the time since 1961. For example, returns to equity were at the rate of 8.4 percent in 1961 and rose to 12 percent in 1967. But the rate of re-

turn dropped sharply in the first half of 1973 to an unusually low 6.5 percent.

Retailer. Over the past 25 years, the retailer has taken a slightly larger share of the price of bread. Last year, he received 5.4 cents, more than double the 2.2 cents he averaged in 1947-49. His share of the total rose to 20 percent.

Indications are that the retailer's share is smaller for bread sold under a store's own label than for wholesale bakery brands. This would be attributable to lower prices, the larger volume sold by supermarkets, and the streamlined distribution system of bakeries serving them.

[Based on manuscript entitled *Marketing Spreads for White Bread* by J. C. Eiland, Commodity Economics Division, and *Marketing and Transportation Situation*, MTS-192, February 1974.]

Bigger Output Still Eludes Mohair Producers

U.S. mohair producers have seen better days. Although prices were good, production last year again failed to match domestic use, slipping to a disappointing 10 million pounds from 1972's 10½ million.

By early 1973, producers in Texas—our leading mohair State—had responded to improved market conditions by building their goat herd to 1.6 million head. But spring brought snow, freezing temperatures, and heavy death losses—dashing all hopes for expanded output.

Goat numbers early this year stood at less than 1.4 million head. And mohair production for 1974 is expected to drop about a million pounds from last year's low levels.

Texas reports a smaller-than-expected kid crop for the third year in a row. Prolonged dry weather and reduced feeding—due to high costs—resulted in the birth of many weak kids and severe death losses. Experts fear that even the current herd and production can't be maintained into 1975.

[Based on material by Edward H. Glade, Jr., Commodity Economics Division, in the *Wool Situation*, TWS-106, April 1974.]

GRAINS & TRAINS



The recent surge in farm exports put such a strain on railroad capacity that many shippers are wondering if the trains can meet their future needs. ERS takes a look at rural shipping problems.

Jack Smith in Plain's County, Nebraska, was more than a little upset. His grain harvest was in, but it had no place to go. The country elevator down the road couldn't han-

dle any more grain until boxcars were dispatched to unload the jammed facility.

Joe White, the elevator manager, didn't feel much better. With record high grain prices and high interest rates on unmoved inventories, each day's delay in shipping cost him money—and restricted the cash flow to area farmers. Yet his unfilled orders for more boxcars had been backlogged for weeks.

Meanwhile, down the tracks in

Gulfeporte, Louisiana, rail cars were arriving with grain faster than port elevators could unload their burgeoning stocks onto grain ships bound for the Black Sea.

Freight cars were stacking up in holding patterns reminiscent of a busy airport suddenly overwhelmed by a groundswell of thick fog. And until the cars were relieved of their cargoes, they could not make the return trip north to pick up more grain.

Rural doubts. An extreme situation? Maybe, but scenarios like this one were all too familiar to grain producers and shippers trying to meet sales commitments during the recent boom in agricultural exports.

Moving goods in rural areas has always had its problems, but a preliminary ERS study report on rural transportation suggests that shipping snags may have reached the crisis stage.

Rural users are seriously questioning the ability of the grain marketing and transportation system to meet their needs. They see inadequate and costly transportation as a possible constraint on future increases in production and sales.

While ultimate solutions to rural shipping hangups are still being debated among transportation planners, for now the practical answers seem to lie in increasing the operating efficiency of the existing network. And railroads are the backbone of the grain transportation system.

Troubled railroads. The railroads, however, are a financially beleaguered industry. Even though traffic volume set records last year and freight rates were up, many lines have continued to fall into serious disrepair and financial insolvency. Several have declared bankruptcy.

Reorganization of faltering rail lines has been enacted as a remedy for deteriorating profits—and service—but many rural communities are concerned about the potential economic effects of rail abandonments, which would undoubtedly be part of any reorganization plan.

Many unprofitable branch lines

have been abandoned by the railroads in past years, and frequently these lightly-traveled lines were located in rural areas.

Looking at agriculture in aggregate, ERS economists feel that so far, abandonments have not seriously reduced important rail segments serving agricultural users.

Adverse effects. Some local communities may have been adversely affected if they had no ready recourse to other modes of transportation. But in many cases rural businesses had already turned to other modes while the rail lines were still operating.

A major difficulty for many country elevators and shippers is a shortage of freight cars when rural shipments step up. Car shortages became critical in some areas last year when export movements gained momentum.

While the car supply problem is usually thought of as an inadequate fleet, some economists believe that at least for the grains, it could be as readily alleviated by improving car utilization as by expanding the number of cars.

Steps have been taken in this direction, and the railroads say the car supply outlook for this year's grain harvest is the brightest in almost 2 years. ERS economists expect only normal shortages through the wheat harvest.

Car supplies up. According to the Association of American Railroads, car shortages to agricultural shippers, reflected in backlogs of unfilled orders, have dropped sharply since last February. Also, additional covered hopper cars are now joining the grain car fleet at a rate of more than 1,500 a month. The railroads say this rate is likely to increase during the last part of the year when grain shipments are heaviest.

Since mid-1972, the covered hopper fleet has jumped from 181,500 to 209,000 cars. With a capacity of up to 100 tons, these large cars now move nearly 70 percent of all rail-hauled grains.

Not only do they carry an average of 3,000 bushels compared with 2,000 for the general purpose boxcar once

used in most grain shipments, but they can also be loaded and unloaded much faster.

Covered hoppers are representative of the trend toward larger average capacities for all freight cars—which has helped to offset their declining numbers in recent years.

Load restrictions. However, there's a hitch to switching over completely to the jumbo cars. In some areas, shippers and country elevators still require the smaller boxcar because they are located on branch lines that can't support large hoppers.

And in times of peak demand, there often haven't been enough boxcars to meet the needs of all the lines with load restrictions. From 1960 to 1972, the number of boxcars declined by nearly half—about 309,000 cars—by far the greatest decrease for any type of car.

However, the railroads note that backlogged shipper orders for general purpose boxcars have also been dramatically reduced this spring, and their supply situation has been further improved by the increasing use of larger cars wherever possible.

Future boxcar supplies would also benefit from a proposal to set up a free-running nationwide pool of boxcars not subject to mandatory return to the owning railroads.

New cars. The pool would initially include 10,000 new cars, whose construction costs would be underwritten by financially sound railroads. Since they would be free to respond more quickly to shippers' needs, the efficiency of car allocations could be substantially boosted.

On other fronts, the smoothing out of the export grain operation bodes well for rail car supplies this harvest season. Grain movements to ports have slowed down considerably, freeing cars for new shipments.

Also, many covered hoppers which were used for moving fertilizer to farming areas in the early spring are now free for harvest use.

Meanwhile, innovations in other areas of railroad operations show potential for upping efficiency in equipment use. Past studies indicate

that freight cars spend only 9-14 percent of their time in running service. Some 18-23 percent is spent loading and unloading, about 35 percent in intermediate rail yards, and 29-38 percent either being repaired or sitting idle.

Speeding up service. Steps taken to speed up car movements include computerized car location, coordination, and yard switching operations, "run through" service, and unit trains.

Run through and unit trains both bypass intermediate railroad yards en route to their destinations, thereby avoiding the time-consuming procedure of switching cars from one rail line to another.

However, a run through train may carry a variety of commodities, while a unit train basically acts as a shuttle service, carrying a single commodity such as grain to one destination and then returning for another load.

Piggybacking, or carrying truck trailers on specially designed flatcars, is another service which offers shipping flexibility and helps to relieve supply pressure on other freight cars.

No easy answers. While these shipping techniques have improved the railroads' ability to move agricultural goods, many economists doubt that the transportation problem in rural areas is likely to be solved without either excess capacity or some means of stimulating other sectors of the economy to share equipment during periods of peak agricultural demand.

Research is underway on developing a pricing system capable of allocating freight cars to the most urgent needs, and Congress is considering proposals to deregulate many railroad operations so that rail service could be linked more directly to supply and demand.

But ERS researchers emphasize that more study is needed to untangle the complicated web of rural shipping problems . . . and that no easy answers are in store for rural areas needing service now.

[Based on the interim report, "Transportation in Rural America," National Economic Analysis Division, and on special material from the Association of American Railroads.]

Developing Countries Expand High-Yielding Grain Acreage

The high-yielding varieties of wheat and rice that spurred the "green revolution" in world food production had spread to more than 80 million acres in Asia and North Africa by 1972/73—up from only 145,000 acres in the 1965/66 crop year.

Only scattered data are available for the 1973/74 season.

According to an ERS study of the breeding and cultivation of these grains in less developed countries, wheat accounted for 41.5 million acres and rice for 39.7 million acres. Another million acres of rice were grown in Latin America.

Excluded from the report were countries such as Mexico, Taiwan, and Guatemala where high-yielding varieties have been cultivated for many years.

About 98 percent of the high-yielding rice and 95 percent of the

wheat were grown in Asia, and more than half of this production was in India, a country desperately needing food production boosts to help feed its large population.

Within Asia, the improved varieties were produced on more than 36 percent of the total wheat acreage and close to 20 percent of the total rice area in non-Communist nations.

High-yielding varieties are principally defined in terms of their genetic potential and genealogy. Most of the current ones are dwarfs or semi-dwarfs which were developed out of agricultural research programs at the International Maize and Wheat Improvement Center in Mexico and the International Rice Research Institute (IRRI) in the Philippines. From these basic types, others were developed in national breeding programs.

Their distinguishing biological

characteristic is responsiveness to fertilizer. Added fertilizer produces greater crop yields rather than vegetative growth of the stems, due to their dwarfing growth pattern. Most of these varieties also ripen early.

While these characteristics are not new—crop varieties have been selected for yield and maturing performances for centuries—their combination with fertilizer and other controlled inputs is a fairly recent occurrence in the less developed nations. The most recent, and probably the most significant, wave of high-yielding, semi-dwarf grains has been adopted since the mid-1960's.

Most countries have continued to increase the acreage devoted to the new grains since their introduction, but the rate of adoption may be expected to fall off in some nations as the area suitable for cultivation is used up.

Other factors, such as poor water control, both supply and drainage, lack of fertilizer and energy inputs, and inadequate weed and pest control, can also interfere with the rate of adoption.

For example, high-yielding types of both wheat and rice tend to be raised under irrigated conditions so that fertilizer can be applied. When water control is inadequate or unreliable, the added risk discourages the use of fertilizer and therefore reduces the advantage of the new grains.

Fertilizer shortages may also adversely affect adoption in some countries in 1973/74, but data are not yet available on the extent of this problem.

Consequently, while the high-yielding grains have the potential to produce considerably more than local varieties—two to three times as much in the case of wheat and up to twice as much in the case of rice—this is seldom fully realized. Where cultivation problems are critical, the new varieties may produce



In addition to cereal grains, India harvests more than 90 million tons of forage each year to feed its growing livestock population.

no more than local grains. Where disease is a special problem, they may actually produce less.

Currently, increased attention is being given to developing grain varieties which can better withstand drought conditions, and in the case of rice, the deep water and poor drainage conditions in low lying areas of major river deltas.

The new IRRI rices are also being bred for improved resistance to diseases and insects as well as for increased consumer acceptance.

[Based on manuscript by Dana G. Dalrymple, Foreign Development Division, entitled *The Development and Spread of High-Yielding Varieties of Wheat and Rice in the Less Developed Nations.*]

Shortages, Drought Cut India's Wheat Harvest

Some Indian states suffered sharp cutbacks of up to 50 percent in wheat yields this year because of input shortages and a severe winter drought.

Yet total wheat production was still probably 6 to 7 million tons higher than it would have been without the use of high-yielding wheat varieties and fertilizer. The decline in wheat yields for India as a whole averaged about 9-10 percent.

High-yielding wheats now account for nearly 73 percent of the total wheat crop. States where non-irrigated traditional wheat varieties still dominate produced less than one-fourth of the 23 million tons of wheat harvested this spring.

High-yielding wheat production had been increasing steadily before declining this year to about 16.4 million tons. Yields fell slightly in Uttar Pradesh and Punjab, the leading wheat producing states, but increased in West Bengal.

Overall, high-yielding varieties will account for about 44 percent of the food grains harvested in India this season. While wheat yields in some areas were crippled by rainfall and fertilizer shortages, an ample sum-



Ancient and modern farming practices are combined as Indian farmers thresh a new, high-yielding rice variety by the age-old method of hitting the stalks against a bench to separate the grain.

mer monsoon boosted the rice harvest to a record high 43.5 million tons.

Production of high-yielding rices—which make up 38 percent of the total crop—increased nearly 3 million tons from last year. This gain was about double the estimated reduction in this year's high-yielding wheat crop.

High-yielding varieties of coarse grains were also up from last year, but total production and average yields fell short of previous peaks.

Average yields for all high-yielding cereal grains have tended to decline in India as the area planted expands. The first plantings were on some of the most fertile land, with high rates of fertilizer applied by progressive farmers.

But as the new grains spread to other areas, irrigation, pesticide use, and seed quality have generally decreased. However, their expansion has caused an upward trend in the average yield for all cereals combined.

Improving seed quality and boosting the rate of fertilizer application may be a solution to declining yields, but more research is also needed to find new high-yielding wheats, particularly those resistant to rust diseases.

In spite of these problems, the average yields for all high-yielding cereals were more than double those for traditional varieties this year.

[Based on special materials from John B. Parker, Foreign Demand and Competition Division.]

Recent Publications

Evaluating the Upstream Watershed Protection and Flood Prevention Program—Arkansas-White-Red Water Resource Region. Gordon Sloggett, Natural Resource Economics Division. ERS-551.

This publication describes one of a series of ERS studies of the Soil Conservation Service's small watershed programs. The report covers changes in land use, fertilization rates, and irrigation attributable to the Arkansas project, and includes suggestions for refining planning estimates of annual flooding and flood damage to crops and pasture.

Health Services in Rural America. Tresa H. Matthews, Rural Development Service. Agri. Info. Bulletin No. 362.

Comparing health care needs and

Single copies of the publications listed here are available free from The Farm Index, Economic Research Service, Rm. 1664-So., U.S. Department of Agriculture, Washington, D.C. 20250. However, publications indicated by () may be obtained only by writing to the experiment station or university. For addresses, see July and December issues of The Farm Index.*

services in rural areas with those in urban areas, this study indicates that rural people continue to have more health problems and less satisfactory care. Federal health care legislation affecting rural areas is

covered, along with examples of successful new public and private experimental health delivery programs.

Farm Corporations and Their Income Tax Treatment. Economic Research Service.

In this publication, five papers presented at a 1969 ERS seminar on Federal tax regulations for farm corporations have been updated to reflect changes in the tax laws through mid-1973. Discussed are different forms of corporate organization suitable for farm firms, special accounting rules for reporting farm income, tax considerations relating to mergers, consolidations, and multiple corporations, and employee benefits under corporate enterprises.

Addresses of State experiment stations:

This ready reference list for readers wishing to order publications and source material published through State experiment stations will be updated again in December 1974.

STATE	CITY	ZIP CODE	STATE	CITY	ZIP CODE
ALABAMA	Auburn	36830	NEW HAMPSHIRE	Durham	03824
ALASKA	University of Alaska	99701	NEW JERSEY	New Brunswick	08903
ARIZONA	Tucson	85721	NEW MEXICO	Las Cruces	88001
ARKANSAS	Fayetteville	72701		N.M. State University (P.O. Box 3-BF)	
CALIFORNIA	Berkeley	94720		Ithaca	14850
	Davis	95616	NEW YORK	(Cornell Station)	
	Parlier	93648		Geneva	14456
	Riverside	92502		(State Station)	
	(Citrus Research Center)			Raleigh	27607
COLORADO	Fort Collins	80521	NORTH CAROLINA	(Box 5847)	
CONNECTICUT	New Haven	06504		Fargo	58102
	Storrs	06268	NORTH DAKOTA	(State University Station)	
DELAWARE	Newark	19711		Columbus	43210
FLORIDA	Gainesville	32601	OHIO	(Ohio State University)	
GEORGIA	Athens	30601		Wooster	44691
	Experiment	30212		Stillwater	74074
	Tifton	31794	OKLAHOMA	Corvallis	97331
GUAM	Agana	96910	OREGON	University Park	16802
HAWAII	Honolulu	96822	PENNSYLVANIA	(106 Armsby Building)	
IDAHO	Moscow	83843		Rio Piedras	00928
ILLINOIS	Urbana	61801	PUERTO RICO	Kingston	02881
INDIANA	Lafayette	47907	RHODE ISLAND	Clemson	29631
IOWA	Ames	50010	SOUTH CAROLINA	Brookings	57006
KANSAS	Manhattan	66502	SOUTH DAKOTA	Knoxville	37901
KENTUCKY	Lexington	40506	TENNESSEE	College Station	77843
LOUISIANA	Baton Rouge	70803	TEXAS	Logan	84321
MAINE	Orono	04473	UTAH	Burlington	05401
MARYLAND	College Park	20742	VERMONT	Blacksburg	24061
MASSACHUSETTS	Amherst	01002	VIRGINIA	St. Croix	00850
MICHIGAN	East Lansing	48823	VIRGIN ISLANDS	Pullman	99163
MINNESOTA	St. Paul	55101	WASHINGTON	Morgantown	26506
MISSISSIPPI	State College	39762	WEST VIRGINIA	Madison	53706
MISSOURI	Columbia	65201	WISCONSIN	Laramie	82070
MONTANA	Bozeman	59715	WYOMING	(University Station Box 3354)	
NEBRASKA	Lincoln	68503			
NEVADA	Reno	89507			

Economic Trends

Item	Unit or Base Period	1967	1973		1974		
			Year	Apr.	Feb.	Mar.	Apr.
Prices:							
Prices received by farmers	1967=100	—	172	158	202	194	183
Crops	1967=100	—	164	143	220	216	205
Livestock and products	1967=100	—	179	169	190	179	169
Prices paid, interest, taxes and wage rates	1967=100	—	145	141	159	161	164
Family living items	1967=100	—	138	134	153	155	157
Production items	1967=100	—	146	139	161	162	167
Ratio ¹	1967=100	—	119	112	127	120	112
Wholesale prices, all commodities	1967=100	—	134.7	130.5	149.5	151.4	152.7
Industrial commodities	1967=100	—	125.9	124.2	138.2	142.4	146.6
Farm products	1967=100	—	176.3	160.6	205.6	197.0	186.2
Processed foods and feeds	1967=100	—	148.1	139.8	164.7	163.0	159.1
Consumer price index, all items	1967=100	—	133.1	130.7	141.5	143.1	144.0
Food	1967=100	—	141.4	136.5	157.6	159.1	158.6
Farm Food Market Basket: ²							
Retail cost	1967=100	—	142.3	137.0	160.3	161.7	159.9
Farm value	1967=100	—	167.0	158.1	189.8	181.5	172.7
Farm-retail spread	1967=100	—	126.6	123.6	141.6	149.1	151.8
Farmers' share of retail cost	Percent	—	46	45	46	44	42
Farm Income: ³							
Volume of farm marketings	1967=100	—	110	75	89	87	83
Cash receipts from farm marketings	Million dollars	42,693	83,449	4,571	6,437	5,902	5,300
Crops	Million dollars	18,434	38,172	1,269	2,772	2,192	1,700
Livestock and products	Million dollars	24,259	45,277	3,302	3,665	3,710	3,600
Realized gross income ⁴	Billion dollars	49.0	90.5	—	—	108.2	—
Farm production expenses ⁴	Billion dollars	34.8	64.4	—	—	80.0	—
Realized net income ⁴	Billion dollars	14.2	26.1	—	—	28.2	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	9,404	1,265	1,918	2,106	2,014
Agricultural imports	Million dollars	—	6,459	696	819	984	878
Land Values:							
Average value per acre	Dollars	⁶ 168	⁷ 247	—	—	—	⁸ 310
Total value of farm real estate	Billion dollars	⁶ 181.9	⁷ 259.5	—	—	—	⁸ 324.0
Gross National Product: ⁴							
	Billion dollars	793.9	1,289.1	—	—	1,352.2	—
Consumption	Billion dollars	492.1	804.0	—	—	844.6	—
Investment	Billion dollars	116.6	202.1	—	—	198.9	—
Government expenditures	Billion dollars	180.1	277.1	—	—	297.8	—
Net exports	Billion dollars	5.2	5.8	—	—	10.9	—
Income and Spending: ⁵							
Personal income, annual rate	Billion dollars	629.3	1,035.4	1,011.6	1,094.8	1,101.4	1,110.5
Total retail sales, monthly rate	Million dollars	26,151	41,943	41,185	43,134	43,872	44,293
Retail sales of food group, monthly rate	Million dollars	5,759	8,811	8,616	9,634	9,594	9,689
Employment and Wages: ⁵							
Total civilian employment	Millions	74.4	⁹ 84.4	⁹ 83.9	⁹ 85.8	⁹ 85.9	⁹ 85.8
Agricultural	Millions	3.8	⁹ 3.5	⁹ 3.4	⁹ 3.9	⁹ 3.7	⁹ 3.5
Rate of unemployment	Percent	3.8	4.9	5.0	5.2	5.1	5.0
Workweek in manufacturing	Hours	40.6	40.7	40.9	40.5	40.4	39.8
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	4.07	4.01	4.21	4.24	4.25
Industrial Production: ⁵	1967 = 100	—	126	124	125	124	125
Manufacturers' Shipments and Inventories: ⁵							
Total shipments, monthly rate	Million dollars	46,449	72,193	70,468	76,978	78,197	79,050
Total inventories, book value end of month	Million dollars	84,655	120,870	110,577	124,831	126,500	128,438
Total new orders, monthly rate	Million dollars	46,763	74,636	73,325	79,128	79,547	82,059

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted first quarter. ⁵ Seasonally adjusted. ⁶ As of March 1, 1967. ⁷ As of March 1, 1973. ⁸ As of March 1, 1974. ⁹ Beginning January 1972 data not strictly com-

parable with prior data because of adjustment to 1970 Census data.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

UNITED STATES GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS, WASHINGTON, D.C. 20402
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE
& FEES PAID
U.S. DEPT.
OF
AGRICULTURE
AGR 101



To stop mailing ☐ or to change your
address ☐ send this sheet with new
address to The Farm Index, ERS, U.S.
Department of Agriculture, Rm. 1459,
Washington, D.C. 20250.

The Farm Index